

IN THE CLAIMS:

Please amend claims 1, 3, 10, 11, 13, 14, 16 and 45 as follows:

1. (Currently Amended) A method of separating compounds, the method comprising the steps of:

a. tagging at least a first organic compound with a first tagging moiety to result in a first tagged compound;

b. tagging at least a second organic compound with a second tagging moiety different from the first tagging moiety to result in a second tagged compound; and

c. physically separating the first tagged compound from a mixture including at least the second tagged compound using a separation technique based upon differences between the first tagging moiety and the second tagging moiety, the separation technique being based upon difference in fluorous nature of the first tagged compound and the second tagged compound.

2. (Original) The method of Claim 1 wherein the first tagging moiety and the second tagging moiety are fluorous moieties that differ in fluorous content or structure.

3. (Currently Amended) The method of Claim 2 wherein the first tagged compound and the second tagged compound are physically separated using fluorous reverse phase chromatography.

4.-9. (Canceled)

10. (Currently Amended) The method of Claim 1 wherein the first tagging moiety and the second tagging moiety are selected so that the order in which the first tagged compound and the second tagged compound physically separate is predetermined.

11. (Currently Amended) A method of physically separating compounds, the method comprising the steps of:

- a. tagging at least a first organic compound with a first fluorous tagging moiety to result in a first tagged compound;
- b. tagging at least a second organic compound with a second fluorous tagging moiety different from the first tagging moiety to result in a second tagged compound; and
- c. physically separating the first tagged compound from a mixture including the second tagged compound using a separation technique based upon differences in the fluorous nature of the first tagged compound and the second tagged compound.

12. (Original) The method of Claim 11 wherein the first fluorous tagging moiety and the second fluorous tagging moiety differ in fluorine content or structure.

13. (Currently Amended) The method of Claim 12 wherein the first tagged compound and the second tagged compound are physically separated using fluorous reverse phase chromatography.

14. (Currently Amended) A method of physically separating compounds, the method comprising the steps of: tagging a plurality of organic compounds with a plurality of fluorous tagging moieties to result in a plurality of tagged compounds, each of the fluorous tagging moieties being different; and physically separating at least one of the plurality of tagged compounds from other tagged compounds with a different tag using a separation technique based upon differences in the fluorous nature of the tagged compounds.

15. (Previously Amended) The method of Claim 14 wherein a first fluorous tagging moiety and a second fluorous tagging moiety of the plurality of fluorous tagging moieties differ in fluorine content or structure.

16. (Currently Amended) The method of Claim 15 wherein a first tagged compound tagged with the first fluorous tagging moiety and a second tagged compound tagged with the second fluorous tagging moiety are physically separated using fluorous reverse phase chromatography.

17.-44. (Canceled)

45. (Currently amended). A method of preparation for a fluorous separation from a mixture of compounds, the method comprising the steps of:

- a. tagging a first organic compound with a first fluorous tagging moiety to result in a first fluorous tagged compound; and
- b. tagging at least a second organic compound with a second fluorous tagging moiety different from the first fluorous tagging moiety to result in a second fluorous tagged compound, the second ~~first~~ fluorous tagging moiety being different from the first fluorous tagging moiety so that the first fluorous tagged compound can be physically separated from the second fluorous tagged compound in the mixture of compounds including the first fluorous tagged compound and the second tagged fluorous compound using a separation technique based upon the differences in the fluorous nature of the first fluorous tagged compound and the second fluorous tagged compound.